

Bottom Light Miner's Lamps

by Manfred Stutzer

Most miners' lamps, be they carbide, oil, benzine, or electric are constructed with the light above the fuel chamber. This was the most practical arrangement for a lamp that was carried or set on the floor. In this article I will present examples of "reverse constructed" lights with the fuel above the light source. These are relatively rare, and to date, are not seen in many collections.

For lack of a better term, I will call these "Bottom Light" lamps. Most were designed to be hung from a ceiling, though some were also constructed so that they could be placed on the floor as well.

One could categorize mining lamps according to their portability. The most portable were carbide cap lamps and oil wick lamps, used primarily by coal miners whose work in soft digging required them to be constantly on the move. The seams the miners worked in were often a low as 18 inches, and a small portable lamp was a necessity here.

Next in portability was the hand lamp which, though widely used in many types of operations, were typically used in the hard rock mines where a miner remained in one spot for a considerable length of time. The passage was a big as the miner cared to make it and a larger lamp that cast a strong light, but could remain in one spot for several hours, was the best alternative.

The least portable lamp was the Bottom Light lamp. In fact many advertisements referred to these lamps as "stationary" lamps. They were best suited to permanent passageways that required long term illumination. The best

place for such a lamp was the ceiling for it would be out of the way and could flood the entire work area with light. The fuel chamber on top was ideal, since it would not block any of the precious light.

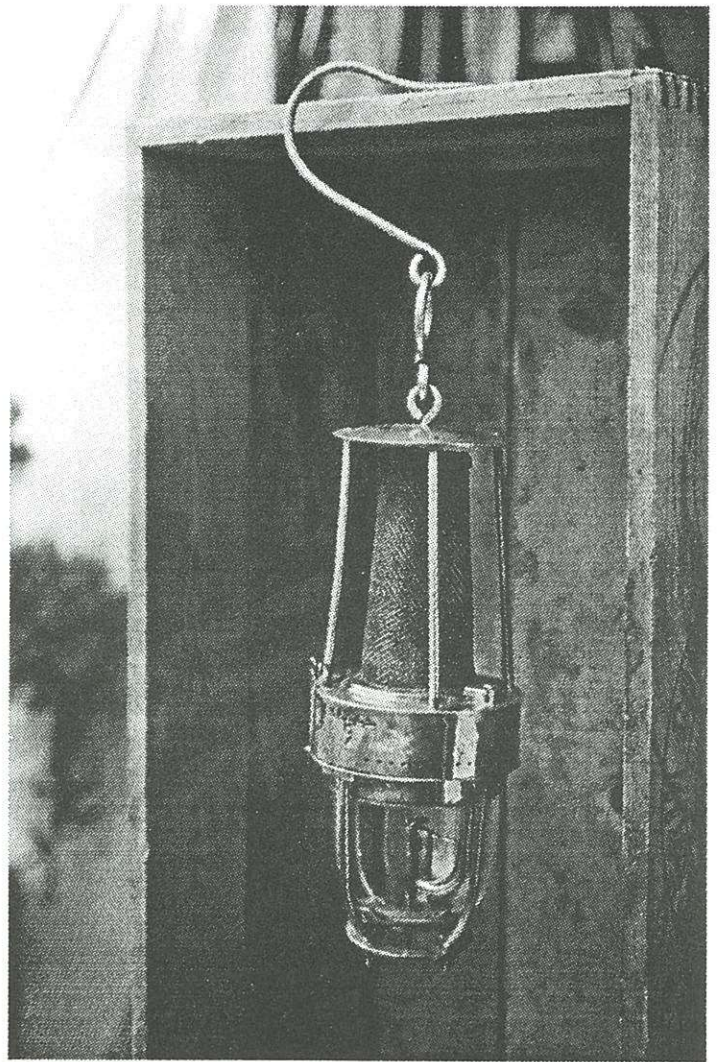
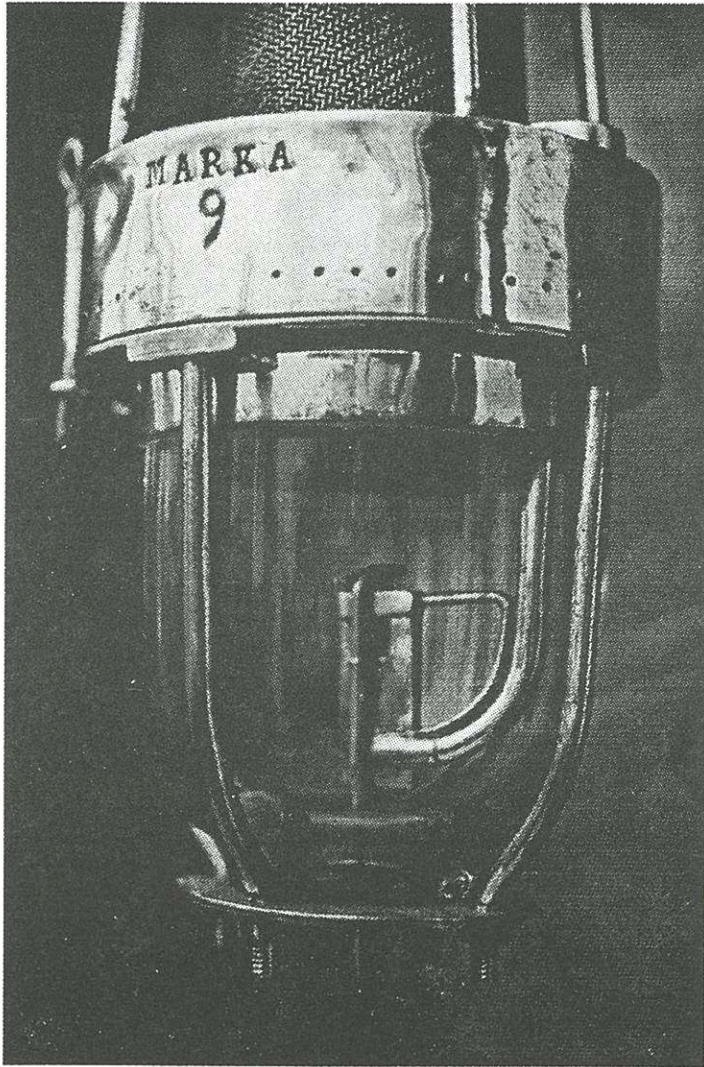
This special purpose lamp design could be contrasted to the Ashworth style lamp that was designed to illuminate and test gas from the ceiling. Though the Ashworth would generally be hung from or held up to the roof, it cast its light upward due to the tapered glass cylinder. It's use for general illumination was limited due to this design.

Bottom Light lamps were used to light roadways, machine houses, horse stables, large rooms, and shafts.

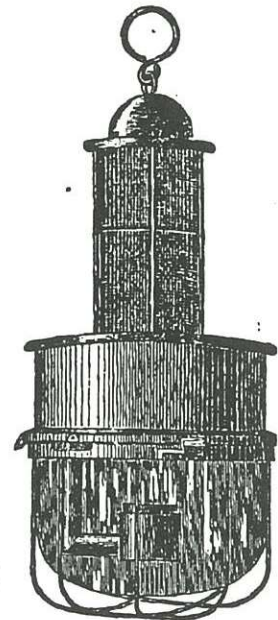
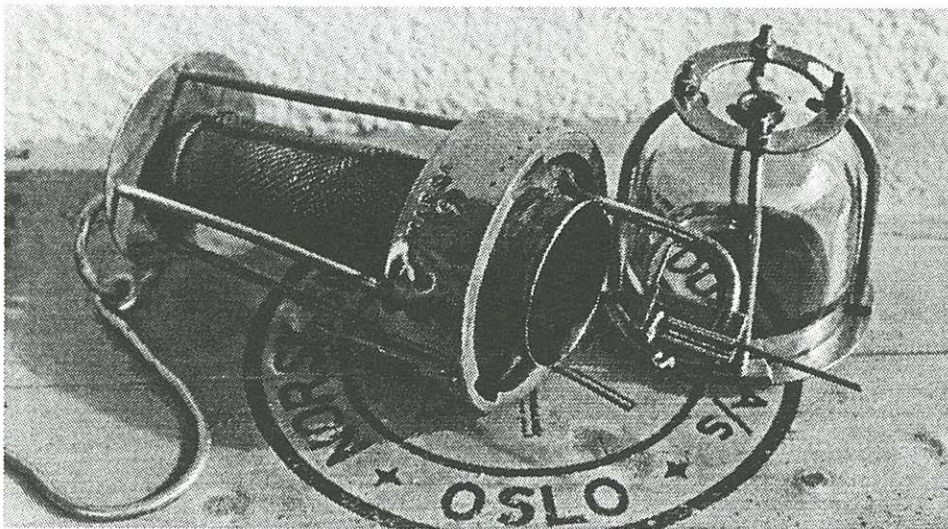
They are found with a variety of fuels, including oil, carbide, and electric. One model was even supplied with forced air for brighter light, and was known as the "air turbo" lamp. Some were safety lamps, though most were for general lighting. Almost all were of European manufacture, with Wolf being the most prolific maker.

One must question why none of the major American firms produced Bottom Light lamps. As these lamps were generally stationary, they sustained little abuse. So it is possible that few were needed, as they rarely would need to be replaced. The market would therefore have been small compared to the nearly disposable cap lamp. This small market niche would probably have been best filled by import.

Flame Safety Lamps



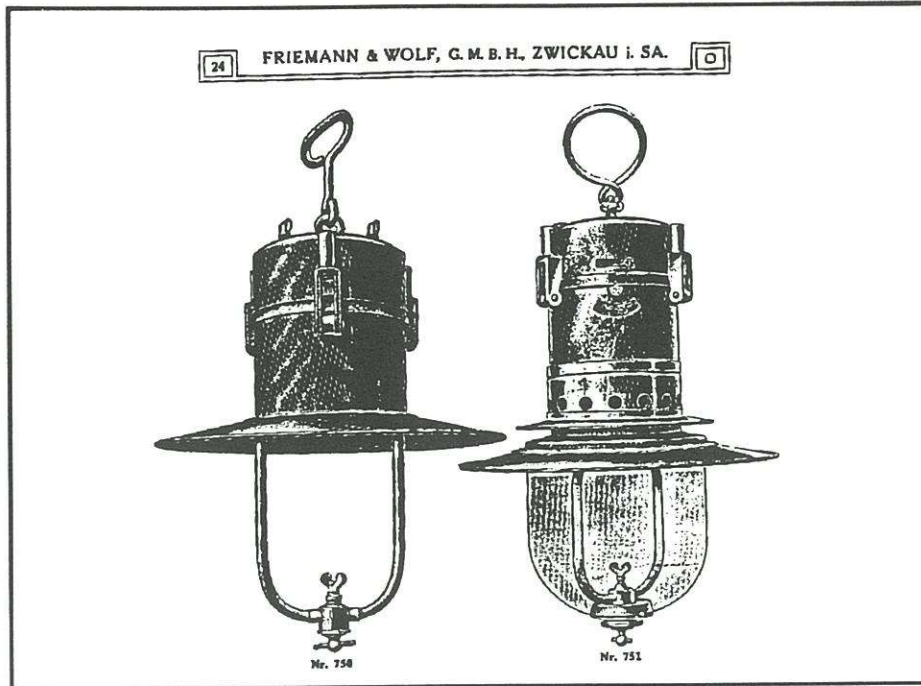
The photos show a safety lamp marked "MARKA". It dates to 1880 from the Austrian-Hungarian monarchy.



*Edcard's Patent,
Fig. 83.*

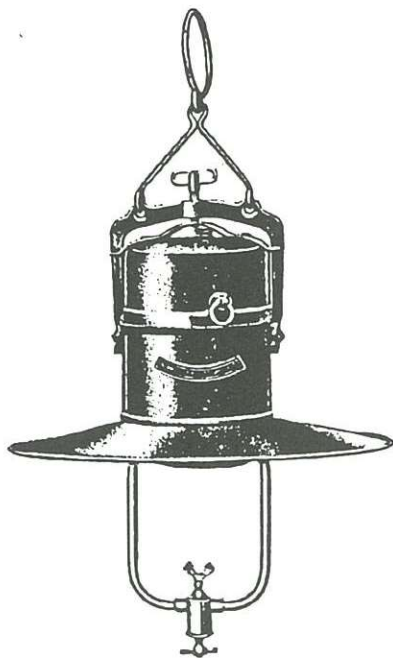
*Flame safety lamp by
Edwards Cardigan Works,
Wakefield, England, 1885.*

Carbide Lamps



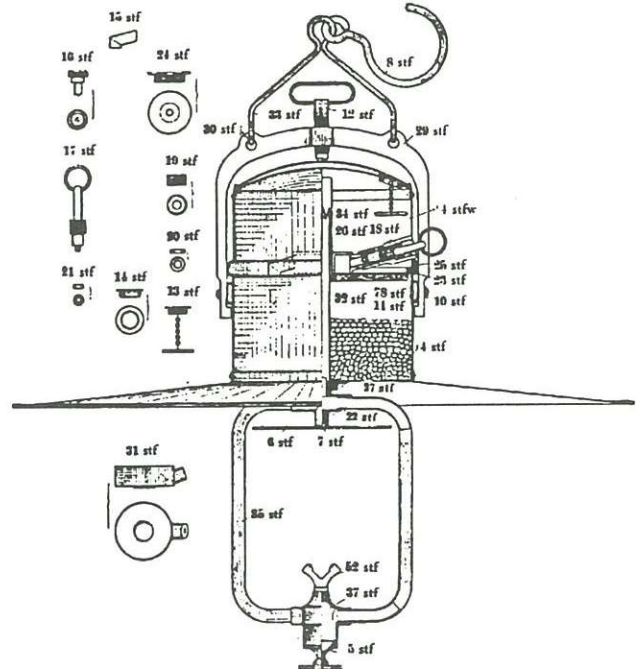
*Friemann & Wolf, Zwickau, Sachsen. Sales catalog 1908. No. 750
Opperau, without glass, No. 751 Oppensi, with glass.*

Stationary Lamp No. 150.



No. 150(7 ASt).

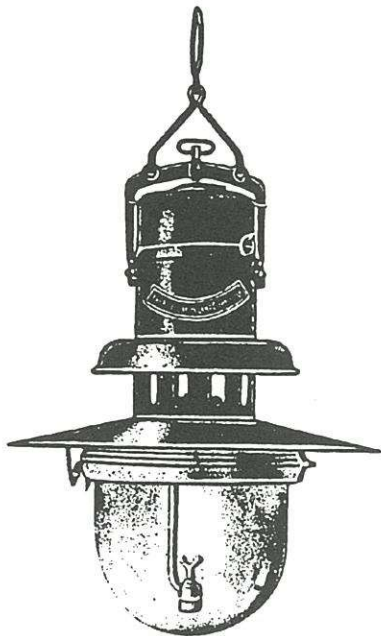
Wolf's freibrennende Acetylenlampe mit Bügelhebelverschluss ohne Glasglocke.



Sectional view of lamp No. 150.

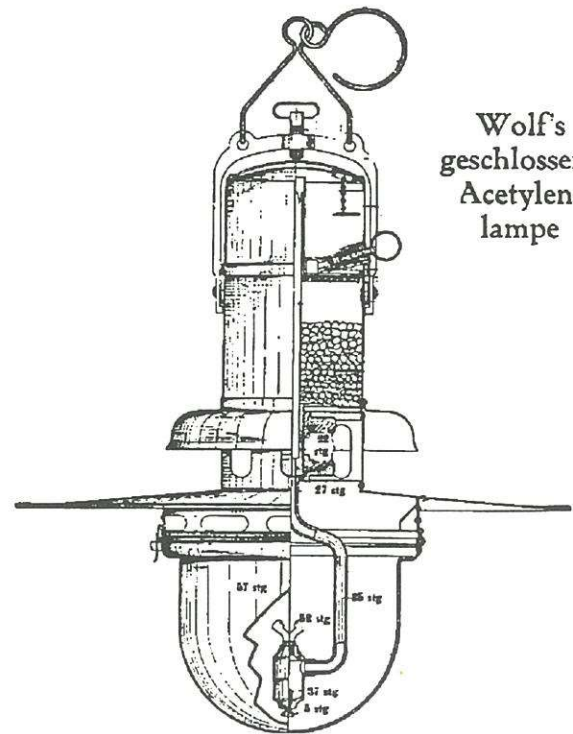
*Stationary Lamp No. 150, Wolf, Sheffield,
1910.*

Stationary Lamp No. 151.



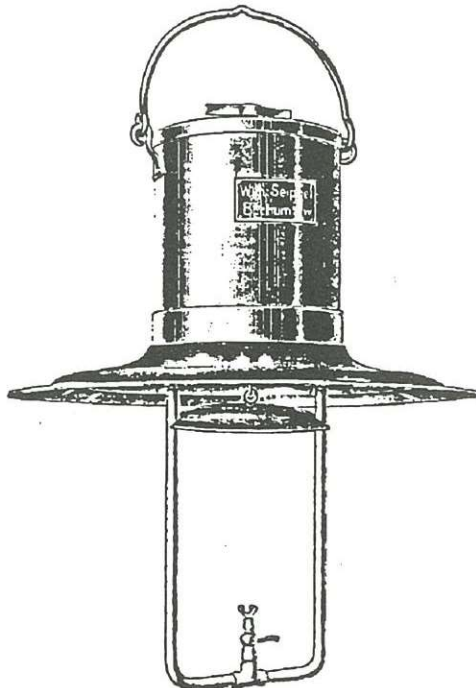
No. 151 (8 ASI).

Stationary lamp No. 151, Wolf, Sheffield, 1910, protected flame.



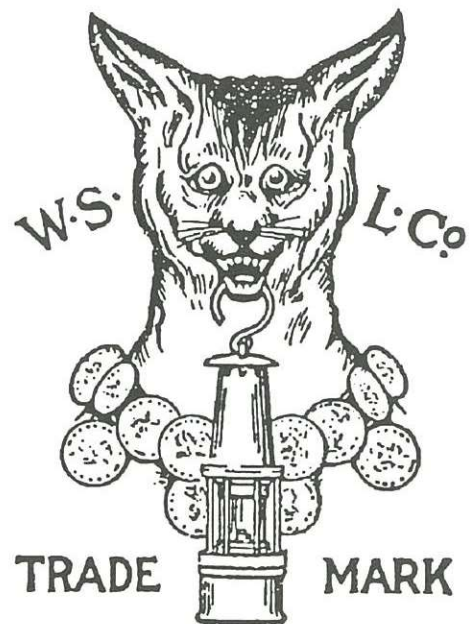
Wolf's geschlossene Acetylenlampe

Sectional view of lamp No. 151.



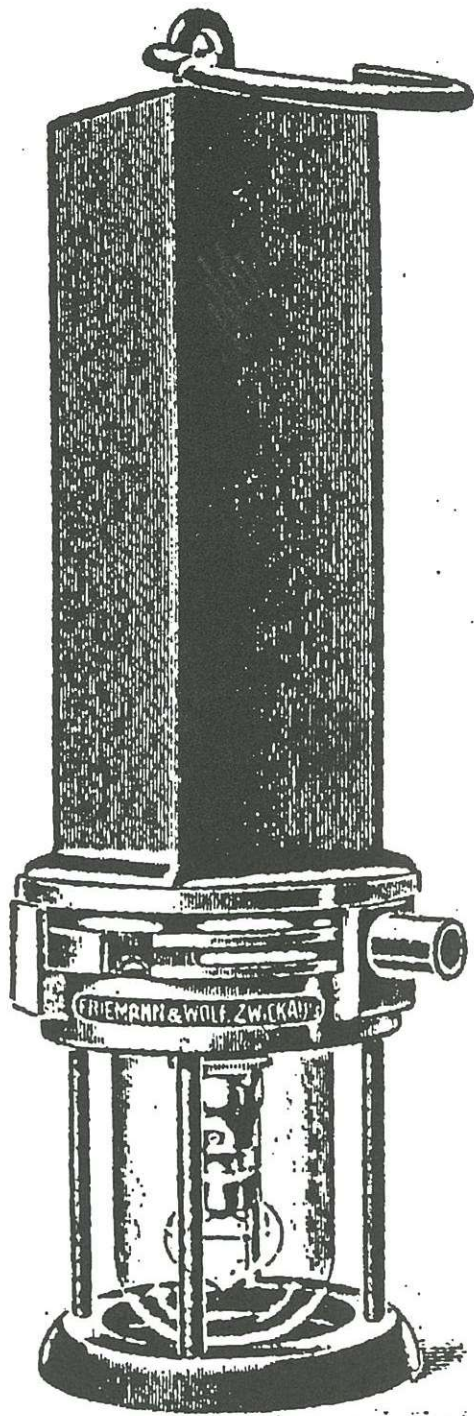
No. 103 b.
Gewicht: 9,5 kg. Höhe: 630 mm

Wilhelm Seippel, Bochum in Westfalen. No. 103b, hanging shaft lamp, sales catalog 1908.



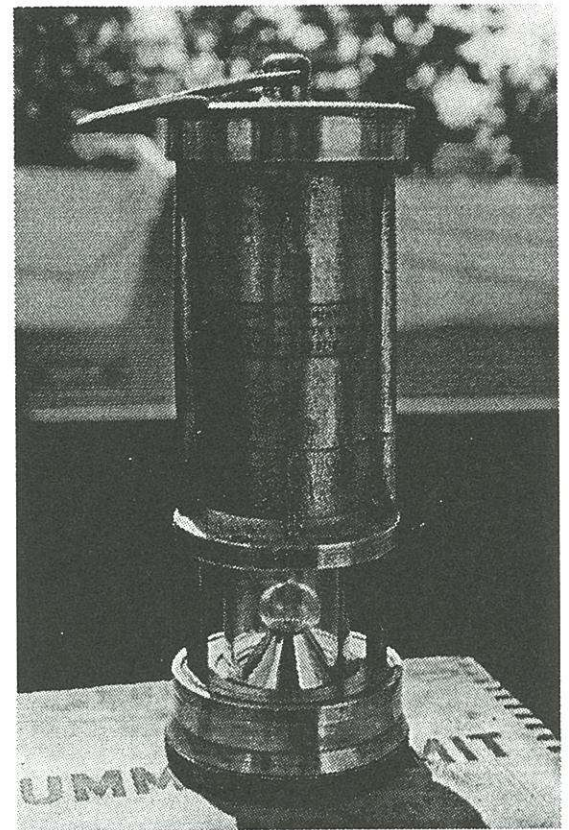
Trade symbol Wolf, Sheffield, 1910

Electric Lamps

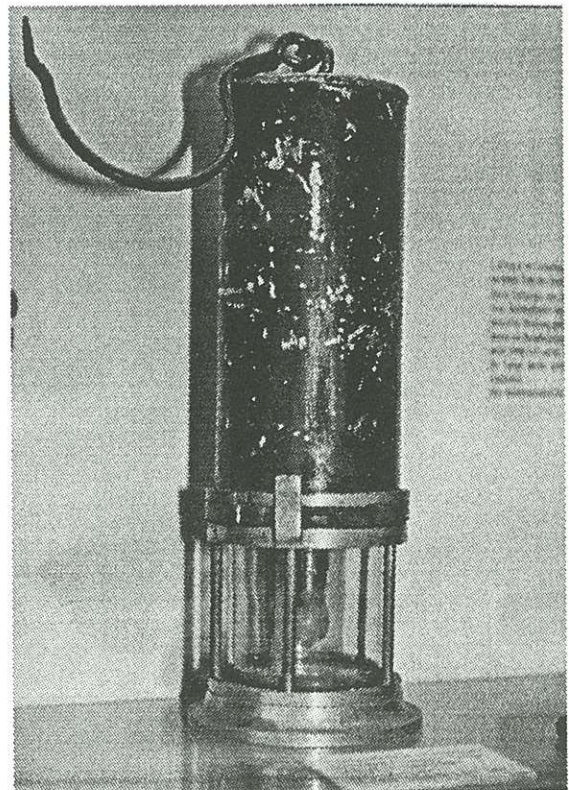


Nr. 821

Friemann & Wolf, Sachsen, sales catalog 1906. No. 821 Radeberg, electric miner's lamp, System Bohres.



Aluminum lamp made by Northumbrian Electric Safety Lamp Ltd. around 1920, England.



Friemann & Wolf, Zwickau, Sachsen, 1902, System Bohres.

KAISERLICHES PATENTAMT.



PATENTSCHRIFT

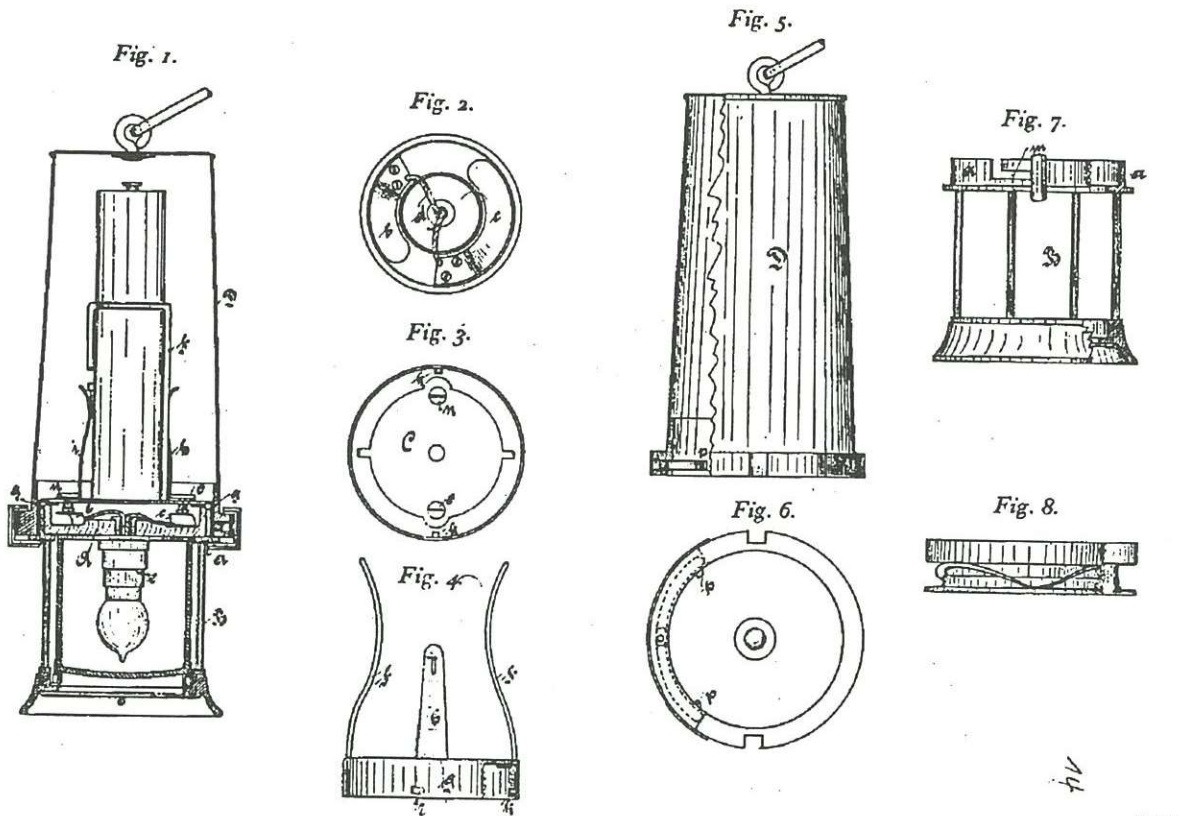
— № 103705 —

KLASSE 21: ELEKTRISCHE APPARATE UND MASCHINEN.

RICHARD CREMER IN LEEDS (ENGLAND).
Schaltvorrichtung für elektrische Grubenlampen.

Patentirt im Deutschen Reiche vom 24. April 1898. ab.

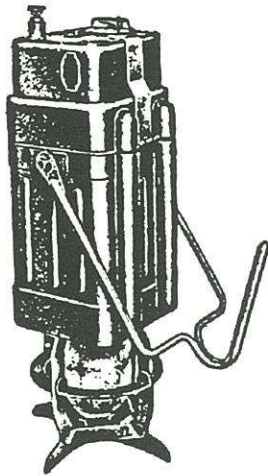
RICHARD CREMER IN LEEDS (ENGLAND).
Schaltvorrichtung für elektrische Grubenlampen.



Zu der

Patent from 1898 for Richard Cremer, Leeds, England.

CEAG
FERNMELDELEUCHTE
 Type FL1
 Ersatzteilliste 1011\31 Est



CONCORDIA-ELEKTRIZITÄTS-AG. DORTMUND
 Grubenlampenfabrik **Dortmund** Münsterstraße 231
 Drahtwort: CEAG Fernschreiber 032169 Fernsprecher 33556

*CEAG, Dortmund, Germany, around 1950,
 type FL 1.*



Shaft Lamp

*CEAG, Barnsley, England, shaft lamp,
 around 1935.*

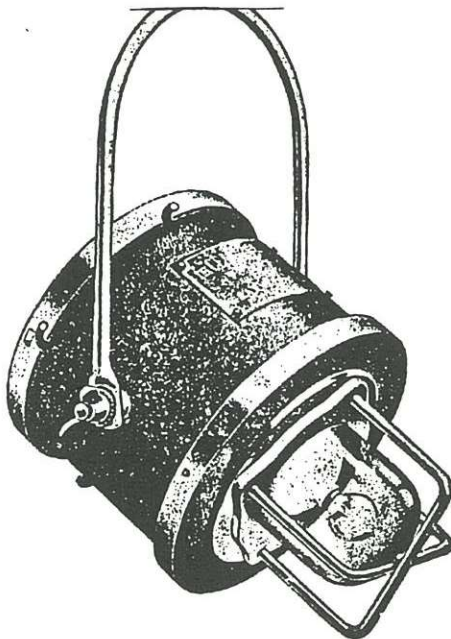
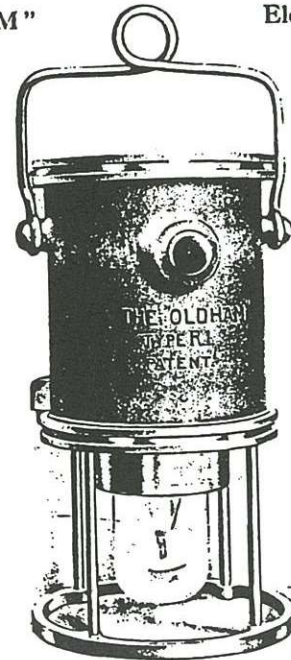


Fig. 104

Similar lamp as above right.

"OLDHAM"
 Approved

**Electric Safety
 Lamps**

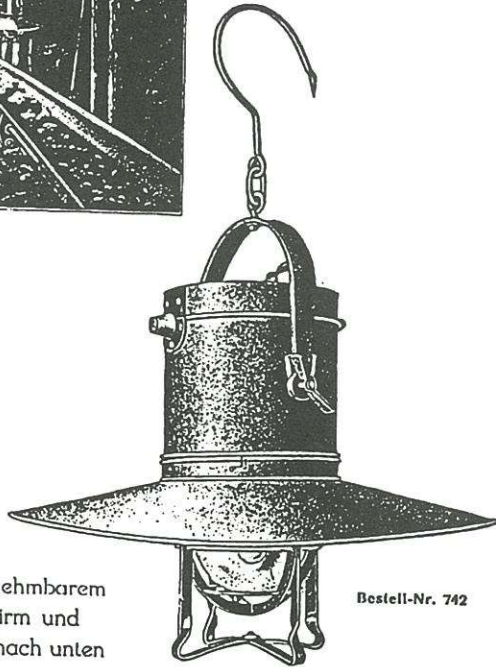
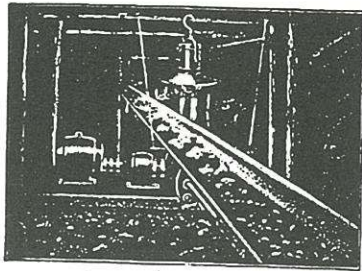


TYPE R.1. for Shaft, Roadway, and Repair work.

*Shaft lamp made by Oldham/Denton, En-
 gland, around 1930.*



Alkali-Starklichtlampen
mit Lichtstrahlung nach unten



Lampe mit abnehmbarem Reflektorschirm und Lichtstrahlung nach unten

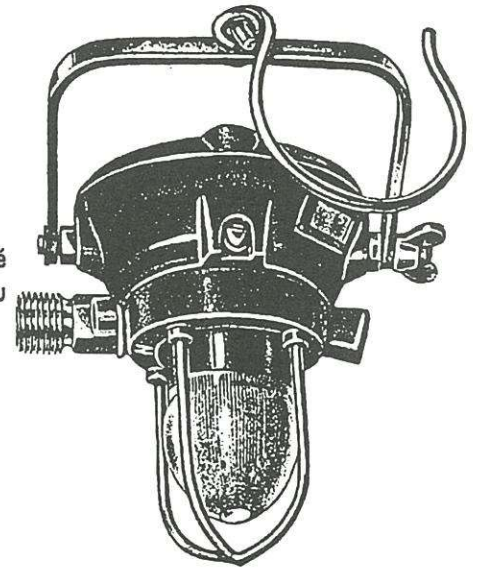
Bestell-Nr. 742

Friemann & Wolf, Zwickau in Sachsen, around 1935.

FW-Preßluftleuchte
Typ 0444 u

FW
Airturbo Lamp
Type 0444 u

Lampe
à Air Comprimé
FW Type 0444 u

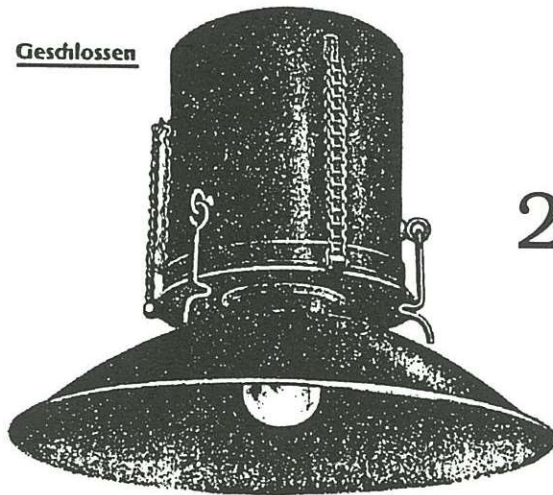


FRIEMANN & WOLF GMBH
AKKUMULATOREN-UND GRUBENLAMPENFABRIK
RUFSA-NR. 31451 **DUISBURG** GEGRÜNDET 1884
BERLIN MÜNCHEN SAARBRÜCKEN

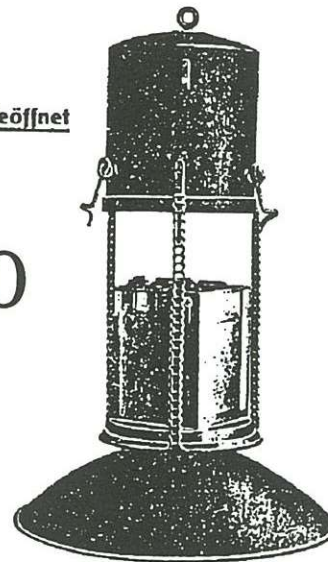
Airturbo lamp, type 044u, made by Friemann & Wolf/Duisburg, around 1960.

f) Elektrische Akkumulatoren-Hängelampe
für Platz-, Raum- und Füllortbeleuchtung etc.

Geschlossen



Geöffnet



20

Nr. 100
Elektrische Akkumulatoren-Hängelampe für Platz-, Raum-, Füllortbeleuchtung etc.
Ganze Höhe der geschlossenen Lampe ca. 360 mm,
Durchmesser des Reflektors 420 mm, Gewicht 13 kg.
Lichtstärke 16 NK., Brenndauer 10 Stunden.

Shaft lamp made by Bochum-Lindener Zuendwaren- und Wetterlampen-Fabrik C. KOCH, sales catalog 1914, Type no. 100.